DOE Operating
Experience Analysis
Safety Management Through Analysis

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U.S. Department of Energy

Office of Operating Experience Analysis, EH-33

ES&H LESSONS LEARNED PROGRAMS

Requirements

At least 30 DOE Directives (Orders, Manuals, Contractor Requirements Documents, Guides, Policies and Notices) call for the use of lessons learned to improve the safety and efficiency of specific programs or processes. These directives require the use of lessons learned, but do not specify methods. The details are left to implementing organizations.

Guidance

- *Development of DOE Lessons Learned Programs* (DOE-STD-7501-95)
  (www.osti.gov/html/techstds/standard/standard.html)
  - Defines attributes of a Lessons Learned Program
  - Provides templates for sharing across the DOE Complex

- *Implementing U.S. Department of Energy Lessons Learned Programs* (DOE-HDBK-7502-95)
  (www.osti.gov/html/techstds/standard/standard.html)
  - Expands the Standard with practical details.
  - Provides examples from actual programs in use across the DOE.

- **Fact Sheets** on Lessons Learned Programs (www.tis.eh.doe.gov/others/ll/sells/info.html#factsheets)
  - Helpful tips for different aspects of a Lessons Learned Program
  - Examples - How to use the Lessons Learned list server, Dissemination techniques

Resources

- **Society for Effective Lessons Learned Sharing (SELLS)** – Most members are Lessons Learned Coordinators from DOE Program Offices, DOE Operations Offices, and DOE Contractor organizations. (www.tis.eh.doe.gov/others/ll/sells/sells.html)

- **Occurrence Reporting Special Interest Group (OR SIG)** – Most members are involved in implementing the occurrence reporting program and derivative activities such as lessons learned. (www.orau.gov/tmsd/trade/siginfo/or/or_hp.htm)

- **Office of Operating Experience Analysis (EH-33)**– Promotes safety management through the use of analysis. Publishes several lessons learned products. (www.tis.eh.doe.gov/web/oeaf)

- **DOE Chemical Safety Program** – Promotes lessons learned activities.
  (www.tis.eh.doe.gov/web/chem_safety)

- **Lessons Learned Home Page** – Internet access to DOE lessons learned information and links to other sources. (www.tis-hq.eh.doe.gov/others/ll/ll.html)

Current DOE-Wide Programs

- **Lessons Learned List Server** – An automatic E-mail system receives and redistributes lessons to over 300 DOE subscribers across the complex. Site lessons learned coordinators e-mail Red Alerts (actual event/urgent), Yellow Alerts (potential event/caution), Blue Alerts (fact or discovery of benefit to others/information), and Green Alerts (good work practice), generally within a day of a major event. The alerts are automatically re-transmitted to lessons learned coordinators at each site for further distribution and review for applicability. Service maintained by the DOE Society for Effective Lessons Learned Sharing. (www.tis.eh.doe.gov/others/ll/listserv.html)

- **ORPS** – The DOE Occurrence Reporting and Processing System receives reports input by DOE sites. The reports are written to inform DOE HQ Emergency Operations Center and HQ Cognizant Secretarial Officers of significant safety events or events that might generate public interest, generally within one working day (two hours for an emergency), with a final report due in 45 days. Data is stored in the system for future analysis. Users can search for information on past DOE incidents and accidents using various criteria. Site lessons learned coordinators can screen ORPS for lessons applicable to their facilities. System maintained by EH. (www.tis.eh.doe.gov/web/oeaf/orps/orps.html)

- *Operating Experience Weekly Summary* – Weekly feedback of ES&H lessons learned from operating experience within and external to DOE. Frequently based on analysis of early reports and preliminary information to assure timely production. The Summary is read by over 40,000 DOE Complex personnel. Produced by EH. (www.tis.eh.doe.gov/web/oeaf/oe_weekly/oe_weekly.html)

- **DOE** *Safety Alerts* – Typically one page documents concerning the most serious, safety-significant events with applicability to other sites. Signed out by the Assistant Secretary for ES&H, and anticipated to get immediate attention across all sites. Hard copies distributed to all DOE line programs, operating contractors, and the DOE safety and health community; posted on the Internet, and e-mailed to lessons learned coordinators at all sites. Produced by EH. (www.tis.eh.doe.gov/docs/safe_alert)

- **DOE** *Safety Notices/Safety and Health Bulletins* – Provide important information that generally originates from technical studies. May be driven by trend analyses or generic safety issues. Issued to promote "pursuit of excellence" in protecting worker safety and health. Hard copies distributed to all DOE line programs, operating contractors, and the DOE safety and health community; and posted on the Internet. Produced by EH.
(Notices: www.tis.eh.doe.gov/web/oeaf/lessons_learned/ons/ons.html
Bulletins: www.tis.eh.doe.gov/docs/bull/links.html)

- **HQ Program Office occurrence analysis** – Defense Programs and Environmental Management review occurrences for lessons learned applicable to their facilities.

Example Activities from Site-Specific Programs

• **Lessons integrated into work procedure preparation:** A site's electronic work permit preparation system includes direct access to a database of lessons learned information. During job preparation, writers can easily search for lessons from similar work items, similar hazards, or previous experience.

• **Bi-weekly lessons newsletter:** A site's Lessons Learned Coordinator reviews internal and external sources. Subject matter experts review list server messages for applicability to site operations. Lessons are published site-wide bi-weekly.

• **Reaching the operators:** To reach operators vice office workers, lessons are distilled into single-issue mini posters. Volunteers distribute the posters to hundreds of change rooms, break rooms, lunch areas, and shops.

• **Electronic distribution:** A site lessons learned group reviews internal and external sources, bins data for expert review, and selects items both applicable to operations and deemed important by subject matter experts. These items are "pushed" to staff based on job title, training records, or self request. A computer-based system routes the items, eliminates redundant destinations, and transmits the information by electronic or other means appropriate for the individual.

• **Management Information:** Site managers receive a daily review of local and external events.

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